

SATELLITE EARTH STATION AUTHORIZATIONS
FCC Form 312 - Schedule B:(Technical and Operational Description)
FOR OFFICIAL USE ONLY

Location of Earth Station Site

E1: Site Identifier:	The "Terafab CGW" Gateway	E5: Call Sign:	
E2: Contact Name:	SpaceX NoC	E6: Phone Number:	360-780-3103
E3: Street:	8733 Timberwolf Trail	E7: City:	Anderson
E4: State:	7a6226aedbb122008e0b75131f96197b	E8: County:	Grimes
		E9: Zip Code:	77830
E10: Area of Operation:	8733 Timberwolf Trail, Anderson, TX 77830		
E11: Latitude:	30° 36' 27.651"		
E12: Longitude:	96° 1' 31.2126"		
E13: Lat/Lon Coordinates are:	nad-83		
E14: Site Elevation (AMSL):	90.22		

If the proposed antenna(s) operate in the Fixed Satellite Service (FSS) with geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement? If NO, provide a technical analysis showing compliance with two-degree spacing policy.	N/A
If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS) or if they operate in the Fixed Satellite Service (FSS) with non-geostationary satellites, do(es) the proposed antenna(s) comply with the antenna gain patterns specified in Section 25.209(a) and (b) as demonstrated by the manufacturer's qualification measurement?	N/A
Is Frequency Coordination required?	Yes
Is coordination with another country required?	No
Is FAA notification required?	No
Is facility operated by remote control?	Yes

POINTS OF COMMUNICATION

Satellite Name: SpaceX Gen2 (S2992/3069)	
E21. Common Name: SPACEX GEN2 (S3069)	E22. ITU Name: SpaceX GEN2 (S3069)
E23. Orbit Location: NGSO	E24. Country:

Satellite Name: SpaceX Gen1 (S2983/3018)	
E21. Common Name: SPACEX (S2983/3018)	E22. ITU Name: SPACEX (S2983/3018)
E23. Orbit Location: NGSO	E24. Country:

ANTENNA

Site ID	E28. Antenna Id	E29. Quantity	E30. Manufacturer	E31. Model	E32. Antenna Size (meters)	E41/42. Antenna Gain Transmit and/or Recieve (dBi at GHz)
The "Terafab CGW" Gateway	CO-1	6	SpaceX	1.47m	1.47	undefined at 0

E28. Antenna Id	E33/34. Diameter Minor/Major (meters)	E35. Above Ground Level (meters)	E36. Above Sea Level (meters)	E37. Building Height Above Ground Level (meters)	E38. Total Input Power at Antenna Flange (Watts)	E39. Maximum Antenna Height Above Rooftop (meters)	E40. Total EIRP for all carriers (dBW)
CO-1	1.5/1.5	1.7	90.22	0	50	1.7	66.5

FREQUENCY

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
CO-1	17800 18600	R	null	480MD7W	0	0

E50. Modulation and Services

BPSK up to 64 QAM; Digital Data

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
CO-1	18800 19300	R	null	480MD7W	0	0

E50. Modulation and Services

BPSK up to 64 QAM; Digital Data

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
CO-1	29500 30000	T	null	480MD7W	60.5	9.7

E50. Modulation and Services

BPSK up to 64 QAM; Digital Data

E28. Antenna Id	E43/44. Frequency Bands (MHz)	E45. T/R Mode	E46. Antenna Polarization (H,V,L,R)	E47. Emission Designator	E48. Maximum EIRP per Carrier (dBW)	E49. Maximum ERIP Density per Carrier (dBW/4kHz)
CO-1	27500 29100	T	null	480MD7W	60.5	9.7

E50. Modulation and Services

BPSK up to 64 QAM; Digital Data

FREQUENCY COORDINATION

E28. Antenna	E51. Satellite	E52/53. Frequency	E54/55. Range	E56. Earth Station Azimuth	E57. Antenna Elevation Angle	E60. Maximum
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Id	Orbit Type	Limits(MHz)	of Satellite Arc E/W Limit	Angle Eastern/Western Limit	Eastern/Western Limit	EIRP Density toward the Horizon (dBW/4kHz)
CO-1	Non-Geostationary	27500 29100	0 / 0	0 / 360	25 / 25	-42.8

CO-1Non-Geostationary17800
 186000 / 00 / 36025 / 250CO-1Non-Geostationary29500
 300000 / 00 / 36025 / 25-42.8CO-1Non-Geostationary18800
 193000 / 00 / 36025 / 250

REMOTE CONTROL POINT LOCATION

E61. Call Sign: REDMOND		E65. Phone Number: 360-780-3103	
E62. Street Address: 23020 NE Alder Crest Drive			
E63. City: Redmond	E67. County: King	E64/68. State/Country: undefined / undefined	E66. Zip Code: 98053

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